

Date: Wed, 15 Dec 93 04:30:21 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V93 #143  
To: Ham-Ant

Ham-Ant Digest                      Wed, 15 Dec 93                      Volume 93 : Issue 143

Today's Topics:

Apartment Antenna VHF/UHF  
Good HT antenna with high gain?  
How do you couple to a "Quad" ?  
Need help with this yagi! (3 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----

Date: Fri, 10 Dec 1993 21:41:36 GMT  
From: concert!gatech!howland.reston.ans.net!cs.utexas.edu!geraldo.cc.utexas.edu!  
portal.austin.ibm.com!awdprime.austin.ibm.com!miltonm@decwrl.dec.com  
Subject: Apartment Antenna VHF/UHF  
To: ham-ant@ucsd.edu

I ended up useing a 1x2 cut to the height of the sliding glass door  
to create a pseudo-door jamb. Applied insulation to cut down on  
infiltration, and made cut-outs as necessary to pass cables through.  
To lock the door I use a "bar" in the track on the inside to keep  
the door relatively close to the new jamb. The biggest air infiltration  
is between the "back" of the door and the fixed panel, I ended up getting  
some caulk-filler to stuff that gap (although I don't always worry about  
using it down here in Austin, TX).

milton

--

Milton Miller KB5TKF miltonm@austin.ibm.com  
I never speak for IBM.

-----  
Date: Mon, 13 Dec 1993 02:55:20 GMT  
From: olivea!pagesat!direct!indirect.com!aardvark@ames.arpa  
Subject: Good HT antenna with high gain?  
To: ham-ant@ucsd.edu

I just bought a Yaesu FT416, and its great, but I'm starting to wonder about this 'rubber duckie' antenna on it. It's about 4.5 inches long, and the gain on it is..okay, but anyone know of any good, small antennas I could use on this baby?

--Aardvark  
--aardvark@indirect.com

-----  
Date: Mon, 13 Dec 93 12:40:55 GMT  
From: library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!  
vixen.cso.uiuc.edu!sdd.hp.com!nigel.msen.com!yale.edu!newsserver.jvnc.net!  
a3bee2.radnet.com!cyphyn!randy@network.ucsd.edu  
Subject: How do you couple to a "Quad" ?  
To: ham-ant@ucsd.edu

emd@ham.almanac.bc.ca wrote:  
: smitht@slick.sps.mot.com (Trevor G. Smith) writes:  
:  
: >  
: > Typically a quad exhibits an impedance of 120 to 200 ohms.  
: > The 1/4 wavelength of 75ohm co-ax is a cheap way to match  
: > the 120/200 ohms.  
: >  
: > I use 4:1 current baluns on my 40m/30m/20m/17m/15m quad loops  
: > with SWR 1:1 at center freq.  
: >  
: > bandwidth for 1.5 swr is 300-500khz depending on band.  
: >  
: > not a cheap solution but quicker than trimming 75 ohm co-ax  
: > with my noise bridge.  
: >  
: > Trevor G3WQ0/AB5EU still exiled in Texas.....  
: >  
: >  
:  
:  
: It depends on what you call a quad. A full wave loop indeed has about 130

: ohms impedance, depending on the height above ground and where you feed  
 : it, as well as whether or not it's in the horizontal or vertical planes.  
 :  
 : A multi-element quad has the impedance reduced significantly by the  
 : proximity of the driven element to the director and/or reflector  
 : elements.  
 :  
 : In fact, if you adjust the spacing of the elements, you can get pretty  
 : close to a 50 ohm impedance with a three or more element quad. You can  
 : use a balun if you wish, but in my experience, it doesn't make much  
 : practical difference. (a 1:1 balun, as compared to RG-58).  
 :  
 : My rule of thumb is to use about .25 wavelength spacing for a quad that  
 : will match 50 ohm cable reasonably well.  
 :  
 : (And yes, I know it won't be exactly 50 ohms, but it will be reasonably  
 : close, and it WILL work reasonably well.)  
 :  
 :  
 I found out the same thing, micro-perfection is not required.....

When I was semi interested in 2 mtrs, I made a 'quad' ( 5 loops kind) and  
 got it to match to 50 ohm cable with JUST the cable wired DIRECT to the wire  
 at the lower corner.

Get the thing well up in the air and provide means to turn it, (turn whole mast  
 like I did, with a stick U-bolted to mast near gnd level) and you WILL see it  
 work.

--  
 Randy KA1UNW                      If you get a shock while  
                                  servicing your equipment,                      "Works for me!"  
 randy@192.153.4.200                      DON'T JUMP!                      -Peter Keyes  
                                  You might break an expensive tube!

-----  
 Date: 14 Dec 93 12:34:27 GMT  
 From: ogicse!emory!europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-  
 state.edu!magnus.acs.ohio-state.edu!wvanhorn@network.ucsd.edu  
 Subject: Need help with this yagi!  
 To: ham-ant@ucsd.edu

>swain\_i@kosmos.wcc.govt.nz wrote:  
 >: I have had a go with the GDO a number of times with coils of wire and loosely  
 >: coupled at the centre of the element with on luck!... Maybe my GDO just don't  
 >: have the grunt I need!..... Any how any ideas ?....

>Try the tip...the center is a low impedance, low voltage point.

>Jim, WA6SDM

There was a brief item in QST earlier this year that addressed this problem. You need to wind a coil with enough turns that you get sufficient coupling with your gdo; then you must tune out the resulting inductive reactance so as to get an accurate measure of resonant frequency.

Take a 2- or 3-turn coil, put a variable cap across it, and tune it to the same resonance point you expect to find in the element. Then, without changing the coil dimensions, nor the setting on the cap, connect it across the center insulator in SERIES RESONANCE. This gives you low impedance, and you can couple your gdo as closely as necessary to get response.

I wish I could remember who submitted this to QST so I could give him or her credit.

Good luck, and 73, Van - W8UOF  
wvanhorn@magnus.acs.ohio-state.edu

-----  
Date: 13 Dec 93 13:20:58 NZST  
From: waikato!comp.vuw.ac.nz!newshost.wcc.govt.nz!kosmos.wcc.govt.nz!  
swain\_i@decwrl.dec.com  
Subject: Need help with this yagi!  
To: ham-ant@ucsd.edu

Okey here is a question I have asked a number of fellow hams and come up blank....

The simple question is how do I find the resonant freq of the director and reflector of a yagi antenna??..

I have had a go with the GDO a number of times with coils of wire and losely coupled at the centre of the element with on luck!.. Maybe my GDO just don't have the grunt I need!..... Any how any ideas ?....

-----  
Date: Mon, 13 Dec 1993 15:49:00 GMT  
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!  
sdd.hp.com!col.hp.com!news.dtc.hp.com!hplextra!hpscit.sc.hp.com!  
cupnews0.cup.hp.com!jholly@network.ucsd.edu

Subject: Need help with this yagi!  
To: ham-ant@ucsd.edu

swain\_i@kosmos.wcc.govt.nz wrote:

: I have had a go with the GDO a number of times with coils of wire and losely  
: coupled at the centre of the element with on luck!.. Maybe my GDO just don't  
: have the grunt I need!..... Any how any ideas ?....

Try the tip...the center is a low impedance, low voltage point.

Jim, WA6SDM

-----

End of Ham-Ant Digest V93 #143

\*\*\*\*\*

\*\*\*\*\*